

## Claims

1.-12. (cancelled)

13. (new) A method for the fail-safe interfacing of a network element with a packet-switching communication network, wherein the network element comprises at least one packet-switching component which is configured in an at least doubly redundant manner, the method comprising:

coupling at least two packet splitters to a respective component of the communication network IP via one respective connection and to the redundant components of the network element via one respective connection, wherein

a first of the redundantly configured components is active and serves to switch payload data, and

all other redundantly configured components operate in standby mode and do not switch payload data;

routing packet data to the respective active component by the packet splitters in the transmission direction from the packet-switching communication network to the network element;

receiving the packet data from the respectively active component by the packet splitters in the transmission direction from the network element to the communication network; and

forwarding the packet data to the communication network by the respectively active component.

14. (new) The method according to Claim 13, wherein the packet data is multiplied by the packet splitters in the transmission direction from the communication network to the network element and is forwarded to all components operating in standby mode, whereby the components operating in standby mode reject the traffic.

15. (new) The method according to Claim 13, wherein packet data also from the components operating in standby mode is received by the packet splitters in the transmission direction from the network element to the communication network and is forwarded to the communication network.

16. (new) The method according to Claim 14, wherein packet data also from the components operating in standby mode is received by the packet splitters in the transmission direction from the network element to the communication network and is forwarded to the communication network.

17. (new) The method according to Claim 13, wherein  
if a packet splitter or a connection or a component of the communication network fails, the traffic transported via the connection affected by said failure is rerouted to the unaffected connections, and wherein  
the connections are tailored to the network element by determining the capacity of the connections such that if one of the connections fails, the capacity of the remaining connections is sufficient to transport all the traffic to be transported on the fail-safe interfacing.

18. (new) The method according to Claim 14, wherein  
if a packet splitter or a connection or a component of the communication network fails, the traffic transported via the connection affected by said failure is rerouted to the unaffected connections, and wherein  
the connections are tailored to the network element by determining the capacity of the connections such that if one of the connections fails, the capacity of the remaining connections is sufficient to transport all the traffic to be transported on the fail-safe interfacing.

19. (new) The method according to Claim 15, wherein  
if a packet splitter or a connection or a component of the communication network fails, the traffic transported via the connection affected by said failure is rerouted to the unaffected connections, and wherein  
the connections are tailored to the network element by determining the capacity of the connections such that if one of the connections fails, the capacity of the remaining connections is

sufficient to transport all the traffic to be transported on the fail-safe interfacing.

20. (new) The method according to Claim 13, wherein, if the active first component fails, the switching of payload data is moved to one of the other components, wherein this other component becomes the active component.

21. (new) The method according to Claim 14, wherein, if the active first component fails, the switching of payload data is moved to one of the other components, wherein this other component becomes the active component.

22. (new) The method according to Claim 15, wherein, if the active first component fails, the switching of payload data is moved to one of the other components, wherein this other component becomes the active component.

23. (new) The method according to Claim 16, wherein, if the active first component fails, the switching of payload data is moved to one of the other components, wherein this other component becomes the active component.

24. (new) The method according to Claim 17, wherein, if the active first component fails, the switching of payload data is moved to one of the other components, wherein this other component becomes the active component.

25. (new) The method according to Claim 20, wherein IP packets or Ethernet frames or Ethernet frames which contain IP packets are transported via the connections.

26. (new) A network element, comprising:

a fail-safe interfacing with a packet-switching communication network having at least one packet-switching component configured in an at least doubly redundant manner;

a first active component of the redundantly configured components for switching payload data;

further redundantly configured components operating in standby mode, which do not switch payload data; and

at least two packet splitters coupled to a respective component of the communication network via one respective connection and to the redundant components of the network element via one respective connection, wherein

the packet splitters have mechanisms for forwarding packet data to the respective active component in the transmission direction from the packet-switching communication network to the network element, and wherein

the packet splitters further comprise mechanisms for receiving packet data from the respective active component in the transmission direction from the network element to the communication network and for forwarding this packet data to the communication network.

27. (new) The network element according to Claim 26, further comprising:

mechanisms for multiplying traffic in the transmission direction from the communication network to the network element.

28. (new) The network element according to Claim 26, wherein the packet splitters comprise mechanisms for multiplying traffic in the transmission direction from the communication network to the network element.

29. (new) The network element according to Claim 27, wherein the packet splitters comprise mechanisms for connection to a packet-oriented communication network and the mechanisms for multiplying comprise mechanisms for multiplying IP-packets or Ethernet frames or Ethernet frames containing IP packets.

30. (new) The network element according to Claim 27, wherein the packet splitters comprise mechanisms for connection to a packet-oriented communication network and the mechanisms for multiplying

comprise mechanisms for multiplying IP-packets or Ethernet frames or Ethernet frames containing IP packets.